DOCUMENT RESUME

ED 225 765 RC 013 810

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TITLE American Indian Adult Education and Literacy: Some Findings of the First National Survey and Their Implications for Educational Policy.
PUB DATE Apr 82
NOTE 38p.; Paper presented at the Meeting of the Pacific Sociological Association (San Diego, CA, April, 1982).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Adult Literacy; Adults; Alaska Natives; *American Indian Education; *Educational Assessment; *Educational Attainment; Educational Status Comparison; *Eskimos; Hawaiians; High School Graduates; Interviews; National Surveys
IDENTIFIERS *Aleut (Tribe)

ABSTRACT

The National Indian Management Service of America, Inc. (NIMS), a nonprofit, Indian owned and controlled consulting firm was funded over a 3-year period (1977-1980) by the U.S. Office of Education/Office of Indian Education to conduct the first national study identifying and accurately describing the extent of problems of illiteracy and the lack of high school completion among adult American Indians, Aleuts, and Eskimos. To achieve a national sample representative of American Indian adults, research included data derived from cluster samples of counties (census districts in Alaska and Hawaii) throughout the United States. Structured home interviews provided information on functional literacy, educational attainment, and social situations of adult Indians, and descriptions of federal and state supported programs providing adult education services were also obtained. Results of this study have important implications for the future of Indian education. For the first time in history, a national data base accurately assessing the functional literacy, educational attainment, and expressed needs of American Indian adults is available to assist educators, legislators, tribal decision-makers, and others in their efforts obtain better educational quality and more Indian self-determination, and to achieve the goals, purposes, and funding levels necessary to enhance the educational programs of all Indians, Aleuts, and Eskimos of this nation. (Author/AH)

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AMERICAN INDIAN ADULT EDUCATION AND LITERACY: SOME FINDINGS OF THE FIRST NATIONAL SURVEY AND THEIR IMPLICATIONS FOR EDUCATIONAL POLICY

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Prepared for the Research and Policy in Sociology of Education Session of the Pacific Sociological Association Meetings, San San Diego, California, April, 1982

RC013810

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ABSTRACT

The National Indian Management Service of America, Inc. (NIMS) a nonprofit, Indian owned and controlled consulting firm was funded over a three year period (1977-1980) by the United States Office of Education/ Office of Indian Education to conduct the first national study identifying and accurately describing the extent of problems of illiteracy and the lack of high school completion among adult American Indians, Aleuts, and Eskimos.*

To achieve a national sample representative of American Indian adults, the research included data derived from cluster samples of counties (census districts in Alaska and Hawaii) throughout the United States. Structured home interviews provided information on the functional literacy, educational attainment and social situations of adult Indians and descriptions of federal and state supported programs providing adult education services were also obtained.

The results of this study have important implications for the future of Indian education. For the first time in history, a national data base accurately assessing the functional literacy, educational attainment and expressed needs of American Indian adults is available to assist educators, legislators, tribal decision-makers and others in their efforts toward better educational quality, Indian self-determination, and to achieve the goals, purposes, and funding levels necessary to enhance the educational programs of all Indians, Aleuts and Eskimos of this nation.

*This research was funded under three separate grants from OIE (grant numbers G00702795, G007802770, and G007902676) originally under Subpart B of Title IV, Part C of the Indian Education Act and what are now sections AEA(a)(2) and (4) of the Indian Adult Education Act. The first phase of the study surveyed adult Indians east of the Mississippi, the second phase sampled those west of the Mississippi, and the final phase included Alaska Natives and Indians residing in Hawaii, to achieve the first national assessment of adult Indian educational needs.

THE PROBLEM

While American Indians remain at the bottom of almost every socio-economic scale, virtually no attention within federal and state bureaucracies has been given to the systematic collection of information which would carefully: 1) assess the educational needs of American Indian adults, 2) examine the accessibility of existing federal and state adult education programs to Indians, and 3) analyze the degree of relationship between adult educational services and levels of functional literacy and educational attainment among Indian adults.

Each release of adult education data which excludes Indian adults has served to heighten the awareness among U.S. Office of Indian Education personnel, Indian educators, and Indian community leaders of the lack of an adequate data base from which to identify educational needs, determine strategies to address those needs, and justify a base-funding source for Indian adult education. Furthermore, without a profile of the educational characteristics and needs of Indian adults, the Congress and decision-makers within the Office of Education have had great difficulty in justifying those appropriations and operational decisions which might better serve Indian people and bring them to a position of parity with other populations.

This lack of an adequate data base with which to make decisions gave rise to the National Adult Indian Education Needs Survey conducted by the National Indian Management Service, Inc. (NIMS).[4] Conducted under three different grants from the U.S. Department of Education, the project was designed so that the Office of Indian Education could make operational decisions about services and funding levels, to better develop policy, and to assess the relationships between social condition, education and literacy.

THE RESEARCH STUDY

There were two major thrusts of the NIMS research. One involved conducting a national home interview study of some four thousand adult Indians selected at random. A sixteen page questionnaire which contained hundreds of questions on major components of the respondent's life, history, social conditions and a fifty-seven item performance level examination was administered to each interviewee. Another questionnaire was mailed to providers of adult education as classified under State Education Agencies and Indian Education Act auspices. These institutional questionnaires measured the educational delivery systems. Study design, methodology, analysis, management and the preparation of reports were truly national in character with consultants, subcontractors and employees coming from the four corners of the United States during the four years that it took to complete the research.

Building on a paper and pencil test of competence, the general Adult Performance Level (APL) survey[5,6] and a previous assessment of Indian adult educational status originated in Oklahoma. This research also: 1)Identified national and regional levels of functional literacy and of educational attainment and need of adult Indians described by various social indicators; 2) Provided information on the operations of federal and state ABE/GED programs and the extent to which these programs are providing services to adult Indians; 3) Analyzed the relationship of certain social indicators and education services to levels of adult Indian functional literacy and educational attainment; and 4) In its final report, summarized possible policy and program implications and recommendations for addressing the educational needs of all Indians.

METHODOLOGY

IEA/SEA Surveys

The State Educational Agencies (SEA) survey was designed to describe each state administered education program and its program participants, staffing patterns and services provided, community involvement, the relationship between adult educational needs and program availability, factors influencing the decision process in adult educational program development and operation, and an analysis of why adults attend state administered adult education programs. Similarly the Indian Education Act (IEA) survey was designed to describe each IEA project within its local Indian community, community involvement in and reactions to project programs, characteristics of personnel and participants, and accessibility and success of programs. To supplement the general survey information regarding all IEA/SEA programs, additional data were obtained from the Office of Indian Education. The item response rates among IEA programs was substantially better than those of the SEA officials.

Home Interview Sample

Defining both participants and potential participant population consisted of inventorying and sampling not just the adult education program participants but all adult Indians. Therefore in order to describe this population the entire United States population had to be surveyed resulting in a national probability sample of all adult Indians.

Although the study began as a mere assessment of the educational needs of eastern Indians, the ultimate goal of the research was to include all Indians. Therefore Dr. Jim C. Fortune, who was responsible

for sampling design and methodology, developed a sampling strategy whereby the results of the study would be representative of Indians in each region and for the United States as a whole as well, using the county as the base for sample selection. Census Districts were used in Alaska and Hawaii.

As the distribution of the Indian population by county in 1970 ranged widely, and as counties where relatively few Indians resided would probably not be targets for OIE programs, those counties where fewer than 250 Indians resided were dropped from the sampling frame. The 1970 census found more than 85 percent of adult Indians (408,339) 16 years of age and older residing in 325 counties having Indian populations of 250 or more. The first stage of the sampling frame then, consists of 325 counties within the larger geographical and cultural regions having Indian populations of 250 or more.

The sample could merely have been selected at random from these 325 counties, but as Indian educational programs might be thought to vary by population size/density, the counties were catagorized by the number of Indians residing there in 1970 as follows:

TABLE 1

THE RELATIONSHIP BETWEEN POPULATION, COUNTY SIZE AND NUMBER OF INDIVIDUALS SURVEYED

Population	Number of Counties	Adult Indian Population	Number of Counties in Sample	Number of Individuals Surveyed
250-1,400	257	150,281	48	1,507
1,401-2,700	40	80,776	14	810
2,701-4,500	15	56,525	7	567
4,501-6-999	7	41,174	4	413
7,000+	6	79-583	6	798
	325	408,339	79	4,095

Thus the sampling proportion was adjusted by size of county so that fewer subjects were interviewed in those small counties that were selected than in larger ones. As illustrated in Table 1 the two adjustments, more counties but fewer individuals sampled in the less populous counties and fewer counties but more individuals sampled in the more populous counties, resulted in sampled populations by county size which are proportionate to their actual populations, plus or minus 3%. In addition seventeen counties (270 respondents) which included fewer than 250 Indians in 1970 were added to the sample in order to test the assumption that limiting the sample to counties having Indian populations of over 250 Indians in 1970 was an appropriate one.

Once the counties and their respective sample sizes were determined, age and sex quotas were used in the process of selecting sample subjects to be certain that the age and sex composition of the sample was in fact no different from the age and sex composition of the adult Indian population living in each region. Indian interviewers were responsible for making certain that the respondent selected from the sample household fit within the specified representative age/sex quota for their interview area.

Sampling Summary

The sample then basically consists of random adult Indians selected within age and sex quota restrictions from random households within counties stratified by population where 250 or more Indians resided in 1970. The counties were selected from the twelve major Indian cultural regions of the United States (according to Gastil,

Swanton and Stewart) so that the sample populations would be representative of each region in terms of age, sex and county population size within a .10 error tolerance. The 4,095 cases selected were also representative of the United States adult Indian population in terms of age, sex, region and the population size of the county in which they lived.

Survey Instrument

The structured survey instrument was developed by NIMS staff and a panel of some seventy experts in adult education, federal administrators, questionnaire and data systems designers and others. Drafts of the instrument were field tested using Indian subjects to determine readability, respondent reaction to questions, the ability to hold the respondent's interest, flow, and singularity of question meaning. Pretest respondents were debriefed after the administration of the instrument to make certain that all possible questions might be answered and so that the instrument might be optimized.

Areas covered within the questionnaire were developed through a thorough literature search in keeping with the goals of the project. The final product covered eleven different kinds of information. The eleven areas are:

1. The demographic characteristics of household members
2. The demographic characteristics of the respondent
3. The respondent's involvement in Indian cultural activities
4. The respondent's language skills in English and other languages

5. The respondent's recent educational involvement
6. The respondent's employment profile
7. The respondent's income and economic self-sufficiency
8. The respondent's health profile
9. The Adult Performance Level of the respondent
10. The life satisfaction of the respondent
11. The interviewer's comments on the success of the interview

In all there were some four hundred ninety-two items (492) or questions that might be answered or completed during the interview. The final instrument was printed in a format where optical scanning equipment could be used to easily translate responses into machine readable format. Open-ended questions or "thumbnail sketches" were included where catagorization was not possible or where additional respondent information was appropriate. Illustrative Flash Cards were used extensively for clarity and ease of questionnaire administration.

Once data for the adult Indian population and educational service providers were obtained, perceived or implied educational need could be associated with available programs and program experiences from both the user's and provider's point of view to determine the extent to which educationally appropriate programs existed and to describe programmatic need.

THE RESULTS

Formal Education

The profile of adult American Indians is characterized by a median education substantially lower than found among any other ethnic or racial group which has not recently immigrated into the United States. As shown in Table 2, the median education of the Indian population is less than the completion of high school while the United States population enjoys a median education that includes some college (one year or more). Western Indians tend to have a greater number of years of formal education than do Eastern Indians but the differences between the distributions are only slight. Also, few Indian American adults have attended college and only 57% have a high school diploma or its equivalent (see Table 3).

Looking at the measures of educational satisfaction, Table 4, one-third of all adult Indians are dissatisfied with the education that they have received. Given the number of years of formal education received, about three years fewer than those completed by the U.S. population as a whole, it is not at all surprising that Indians reflect dissatisfaction levels as high as this. Consistent with educational level, Indians who reside in the eastern United States reflect greater levels of dissatisfaction than do those who live in the West. Again though, these differences are only slight ones.

More than three-fourths of the adult Indian population would have liked to have had more education, with Western Indians more inclined to feel that need than those in the East. Although these differences are slight, they may be important considerations in educational program development and marketing.

The last variable reported in Table 4 completes the profile of educational dissatisfaction. Two-thirds of the adult Indian population feel that they received an inappropriate education for the kinds of occupations and lives that they wanted to lead. Eastern Indians are slightly less well satisfied with the kind of education received, but only slightly.

Adult Proficiency Levels (APL)

Adult proficiency in the use of knowledge acquired in school and elsewhere was measured through the administration of selected questions from Northcutt's Adult Performance Level inventory. In all, representative questions were selected from each of ten of the dimensions measured on Northcutt's instrument. As the inclusion of all of Northcutt's questions would have made the questionnaire excessively lengthy for the kind of interview desired, only a small number of questions was used to represent each of the ten scales. As well, the original APL inventory was designed for use nationally but was not specifically relevant to Indian language or culture. In order to increase the applicability of the situation to the Indian culture and to increase understanding, specific questions used were redrafted in the Indian context for clarity. Further, the inclusion of questions in the sample survey was partially dependent on the questions' relevance to the Indian situation. That is, questions used were selected with the respondent group in mind, so as to decrease the likelihood of misunderstanding and/or misinterpretation and to assure that the item did not include terms or situations uncommon to Indian life and culture.

TABLE 2

FORMAL EDUCATION OF U.S. INDIANS

Years of Formal Education	Total Indian Population		Indians Residing in the East		Indians Residing in the West	
	#	%	#	%	#	%
0	187	4.88	39	5.29	148	4.78
1 - 6	281	7.34	81	10.99	200	6.47
7	124	3.24	30	4.07	94	3.04
8	260	6.79	54	7.33	206	6.66
9	320	8.36	67	9.09	253	8.18
10 - 11	753	19.66	141	19.13	612	19.79
12	1,080	28.20	196	26.59	884	28.58
13 - 15	634	16.55	96	13.03	538	17.39
16	113	2.95	20	2.71	93	3.01
17+	78	2.04	13	1.76	65	2.10
	3,830	100%	737	100%	3,093	100%
% of Total Population		100%		19.24%		80.76%

TABLE 3

HIGH SCHOOL ATTAINMENT OR EQUIVALENCY

ITEM CONTENT: Did you receive a high school diploma or pass a high school equivalency exam?

	Nation	East	West
Yes, High School Diploma	1,762 (46.8)*	303 (42.1)	1,459 (47.9)
Yes, Equivalency Test	381 (10.1)	67 (9.3)	314 (10.3)
No	1,622 (43.1)	349 (48.5)	1,273 (41.8)
Subtotal	3,765 (98.3)	719 (97.6)	3,046 (98.5)
Missing Cases	65 (1.7)	18 (2.4)	47 (1.5)
TOTAL	3,830 (100%)	737 (100%)	3,093 (100%)

*(%)

TABLE 4

EDUCATION SATISFACTION OF U.S. INDIANS

	Total Indian Population		Indians Residing in the East		Indians Residing in the West	
	#	%	#	%	#	%
Dissatisfied with their education (D17=5,6,7)	1,267	33.08	260	35.28	1,007	32.56
Feel that they need more education (D10=No)	3,011	78.62	548	74.36	2,463	79.63
Would have liked a different education (D16=Yes)	2,576	67.26	509	69.06	2,067	66.83

As the sampled questions were not administered to a national sample of the U.S. adult population, the issue of bias as a result of question modification cannot be addressed specifically, nor can we directly determine the extent to which scores or the shortened index would have been consistent with those (%'s) which might have been obtained through the use of the original inventory. We can, however, assume that as the questions were selected and then modified so as to reflect Indian culture and life, it is highly likely that if bias were introduced it would be expressed through higher scores on each of the ten indexes independently as compared with national data. Our adult performance levels for American Indian adults then, should be equal to or higher than those reported for a national adult sample drawn without regard to race or ethnicity, if in actuality both Indians and non-Indians are at exactly the same levels of performance.

Table 5, Scales A through J, show the actual correspondence to levels of proficiency on the ten test indexes of performance for the U.S. population as measured by Northcutt and for our sample divided by region, East and West. The levels are divided into three categories by percent of the items answered correctly, where: 1 = 0-50%, 2 = 51%-75%, and 3 - 76%-100%.

For the skills for which there are national norms, Health, Community Resources, Law, Consumer Education and Occupational Knowledge, there can be no question that U.S. Indians lag far behind the nation as a whole. As well, regardless of scale, Western Indians have substantially lower percents in Level 2 and 3 than do Eastern Indians. Their ability to demonstrate knowledge results in scores that for some scales are less than half those found in the national norm. It is

TABLE 5

U.S. NORMS AND ADULT INDIAN PERFORMANCE AS MEASURED BY THE ADULT PERFORMANCE LEVEL INSTRUMENT

LEVEL	U.S. NORM.	U.S. INDIAN POPULATION TOTAL	EAST	WEST
A. HEALTH				
1	15.5%	54.4%	41.1%	57.6%
2	39.9%	23.2%	29.3%	21.7%
3	44.6%	22.4%	29.6%	20.7%
Total	100%	100%	100%	100%
B. COMMUNITY RESOURCES				
1	14.3%	46.6%	28.9%	50.8%
2	31.1%	16.2%	24.8%	14.1%
3	54.6%	37.2%	46.3%	35.1%
Total	100%	100%	100%	100%
C. LAW				
1	19.5%	51.9%	38.2%	55.1%
2	51.6%	23.2%	32.0%	21.1%
3	28.9%	24.9%	29.8%	23.8%
Total	100%	100%	100%	100%
D. CONSUMER EDUCATION				
1	15.6%	47.9%	34.4%	51.2%
2	38.6%	21.6%	28.8%	19.8%
3	45.8%	30.5%	36.8%	29.0%
Total	100%	100%	100%	100%
E. OCCUPATIONAL KNOWLEDGE				
1	15.2%	48.6%	37.1%	51.4%
2	32.5%	17.6%	19.8%	17.1%
3	52.3%	33.8%	43.1%	31.5%
Total	100%	100%	100%	100%
F. INTERPRETATION OF FACTS AND FIGURES				
1		48.4%	31,6%	52,4%
2		18.3%	21.8%	17.4%
3		33.3%	46.6%	30.2%
Total		100%	100%	100%

Table 5 (continued)

LEVEL	U.S. NORM	U.S. INDIAN POPULATION TOTAL	EAST	WEST
G. WRITING*				
1		49.8%	36.4%	52.9%
2		18.4%	25.8%	16.7%
3		31.8%	37.8%	30.4%
Total		100%	100%	100%
H. COMPUTATION*				
1		52.7%	40.0%	55.7%
2		21.0%	25.5%	19.9%
3		26.3%	34.5%	24.4%
Total		100%	100%	100%
I. PROBLEM SOLVING*				
1		48.0%	29.5%	52.4%
2		27.3%	37.5%	24.8%
3		24.7%	33.0%	22.8%
Total		100%	100%	100%
J. READING*				
1		48.9%	38.1%	51.5%
2		18.5%	23.3%	17.4%
3		32.6%	38.6%	31.1%
Total		100%	100%	100%

*There are no national norms available for these indexes.

important to remember here that we would have expected Indians who possessed equal abilities to meet the national norm or to exceed it because of possible induced bias in the APL items used after cultural translation. These low levels of performance, whether East or West are indicators of deficiencies in the educational system including both formal and informal educational sub-systems.

The most devastating interpretation of these data comes when one considers that Indians are competing for jobs, participating in the quality of life and reaping the benefits of late twentieth century life in the United States. Yet Indians are at such a disadvantage as compared to the U.S. population as a whole that they cannot be considered a serious contender for jobs, of understanding contemporary life, taking advantage of health benefits, being effective consumers and availing themselves of legal remedies where they might, knowing what occupations they might train for or what training is probably required; nor are they in likelihood comparably proficient in the 3 R's as measured by Reading, Writing and Computation indexes.

Now if knowledge is measured by the scores on the "Three R's" portion of the Adult Performance Level examination, adult Indians are able to answer only about three-fifths of those items correctly (Table 6) with Eastern Indians far exceeding the performance of those who reside in the West. If converted to differences in scores, Eastern Indians answered nine more questions correctly than did those in the West, 55% more. In addition to regional differences, average tribal performance varied from scores of 22% to 97% on the literacy dimensions where, if one were to answer the same questions at random, a score of 25% would be expected. The average score was about 52%, while the national norm for the U.S. population as a whole was in the eighties.

TABLE 6

ADULT PERFORMANCE LEVEL
THREE R's PROFICIENCY OF U.S. INDIANS

	Median % of 3R's Questions Answered Correctly	Number of Questions That % Represents
Total Indian Population	56.31	20 of 36
Indians Residing in the East*	70.13	25 of 36
Indians Residing in the West	45.79	16 of 36

*Based on 692 observations

Note: A score of 25% would be expected by chance if the answers to all questions were guesses.

Thus, performance on the Adult Performance Level examination was tragically low, the reciprocal of what one would expect from the American adult population as a whole. At the same time, literacy, as measured by the reading, writing and arithmetic dimensions of the performance examination, did not increase importantly as years of formal education increased; rather it even declined among those with advanced degrees.

Comparatively, although slightly less well educated in terms of years of education and somewhat less satisfied with that education, Eastern Indians far out-perform those of the West. This may in part explain the differences between the two groups with respect to their interest in more education. Regardless, these tables do not reflect high achievement or great satisfaction in the level and kind of education that Indians have received.

Indeed, if we had left the column headings to these tables blank and allowed the reader to supply his or her own column headings where the U.S. Indian Population now is shown, one might have assumed the data to be from Developing Nations (in the case of Eastern Indians) or from Underdeveloped ones (in the case of the West). In late twentieth century America, this is certainly an indictment of the cumulative effects of social differentiation and of a social and political system or systems that would allow this condition to exist. Even though some of the individual scale percentages for Indians are closer to national norms than are others, the overwhelming pattern is one of a lack of useful knowledge pertaining to the dimensions tested. For Western Indians the differences constitute overwhelming proportions. Whatever the cause, the condition of adult Indian knowledge and proficiency is grave.

Sources of Educational Attainment

Referents to the sources or types of adult educational attainment were derived by combining the results of two questionnaire items: 1) Did you receive a high school diploma or pass a high school equivalency test? and 2) Have you attended or been enrolled in an ABE/GED/SEA Program administered by the state of "state", the local school or any community or Indian group?

As shown in Table 3, Indian adults in the West have slightly more high school diplomas proportionately (47.9%) than do those in the East (42.1%). Conversely, nearly half of the adult Indians (48.5%) east of the Mississippi have neither a high school diploma nor a GED. The same is true for over forty-one percent of those in the West. About 10 percent of all adult Indians have a high school equivalency (or GED). It should be pointed out here that because the western states contain the vast majority (80.8%) of the sample population of Indian adults, their numbers weigh more fully in the national figure, and consequently theirs more nearly approximates the national profile.

Table 7 shows that only about one-fifth (21.3%) of adult Indians have ever attended or been enrolled in an ABE/GED/SEA Program. Of those enrolled throughout the nation, most (35.2%) tend to be found in programs operated by Indian groups and community agencies, followed by public grade or high schools (26.3%), private vocational schools (14.6%), public two-year colleges (13.5%), and then four-year colleges or universities (10.4%). The national pattern, however, does not fit the regional profiles, especially for programs east of the Mississippi. In the East, nearly two-thirds (65%) of adult educational

programs are operated by Indian groups and community agencies, followed by public grade or high schools (15.2%), private vocational schools (10.4%), and four-year colleges or universities (6.7%). Only 2.4 percent were enrolled in public two-year college programs. In western states, a much lower percentage of adult Indians were enrolled in programs operated by Indian groups and community agencies (only 27.1%) and more (29.2%) are attending programs in public grade schools or high schools. Some adults also use programs in public two-year colleges (16.5%), private vocational schools (15.7%), or four-year colleges or universities (11.4%). Thus, Indians in western states have had to rely more upon adult education programs operated by institutions other than the local Indian group or community agency, whereas eastern Indians depend almost entirely upon local Indian groups and community agencies for fulfilling their education needs.

The sources or types of educational attainment were thus derived by combining the results of these two items and thereby generating the following categories: 1) those persons having "none" of the sources of educational attainment; these answer "no" to both items (i.e., they have attained neither a high school diploma nor its equivalent (GED) and they have never attended or enrolled in an ABE/GED type program, 2) persons under the ABE category are those who also have neither a high school diploma nor a GED, but who have attended an adult education program, 3) the GED category consists of Indian adults who have achieved an equivalency by attending an adult education program, 4) the category of Equivalency as defined as those who obtained an equivalency, however who were not enrolled in a regular GED program, and 5) those who achieved

TABLE 7

U.S. INDIANS WHO HAVE BEEN ENROLLED IN OR ATTENDED ABE/GED/SEA PROGRAM ADMINISTERED BY THEIR STATE, LOCAL SCHOOL OR ANY COMMUNITY AGENCY OR INDIAN GROUP.

	Nation	East	West
Public Grade or High School	204 (5.6)*	25 (3.6)	179 (6.1)
Public Two-year College or Technical Institute	105 (2.9)	4 (0.6)	101 (3.4)
Private Vocational, Trade or Business School	113 (3.1)	17 (2.4)	96 (3.3)
Four-year College of University	81 (2.2)	11 (1.6)	70 (2.4)
Other (Indian Group or Community Agency)	273 (7.5)	107 (15.3)	166 (5.6)
No (Not in ABE/GED/SEA Programs)	2,873 (78.7)	534 (76.5)	2,339 (79.3)
Subtotal	3,649 (95.3)	698 (94.7)	2,951 (95.4)
Missing Cases	181 (4.7)	39 (5.3)	142 (4.6)
TOTAL	3,830 (100%)	737 (100%)	3,093 (100%)

*(%)

a high school diploma in the traditional way, without attending ABE/GED adult education programs.

By crosstabulating these sources of educational attainment with the types of APL functional literacy levels, it was found that contrary to our expectations, adult Indians who had received a high school equivalency through a GED program tended to outperform regular high school graduates. Furthermore, adults who received their educations in GED programs operated by local public schools and by Indian groups and community agencies showed the highest literacy levels.

Education Providers

For adult Indians, educational providers tend to be defined in terms of State Education Agency (SEA) programs that administer or supervise all non-federal adult education programs in the fifty states, or as Indian Education Act (IEA) programs which are responsible for federal adult Indian education programs. Data obtained from these two sources represent all state, local and federal educational programs (except for the Bureau of Indian Affairs); their characteristics, goals, target populations and participant groups would for the most part define the educational system within which adult Indians receive their education and training.

While the response rates to items and the return rates of the SEA/IEA questionnaires were quite good for the IEA programs, only about six percent of the requested information was provided by the 39 (of 51) SEA programs returning their instruments. That is, whenever numbers of Indians participating in state adult education programs and activities were requested, virtually no data were reported. Some states admitted

that they simply did not know or did not have the data while others indicated the information was not available. Three (sometimes four) SEA's cooperated by providing most of the information regarding Indian participation. The rest, however, could not or would not provide such data. In addition to their poor response rate, it should be kept in mind that SEA officials' assessments of the education needs and problems of adult Indians may well be nothing more than speculative, since over 92 percent of them admit that they have never conducted a formal, documented state assessment to ascertain adult Indian education needs. The most important needs of Indian adults as identified by IEA directors are high school preparatory (GED), basic education, vocational/technical education, life coping/consumer education, and Indian cultural activities. Also reported as being important were managerial/professional skills, college education, traditional arts and crafts, and Indian language classes.

When asked to describe the educational opportunities for adult Indians compared to those for non-Indians in their state, most SEA officials (71%) said Indian opportunities were "the same as," a few (10%) said "better than," and 19 percent said "worse than" those of non-Indians. The same figures for IEA project directors are 23%, 32%, and 39% respectively.

Among the greatest difficulties they perceived in involving Indian adults as students in presently-operating state adult education programs, SEA officials mentioned inadequate recruitment channels with Indian communities (44%), a lack of an identifiable community from which to recruit Indian participants (36%), and a lack of trained staff to deal with the special problems of Indian adults (33%).

They also cited problems with transportation (28%), children or childcare (23%), or a critical incompatibility between Indian adults and their educational programs (21%). Fifteen percent of the SEA's could foresee no major problems in educating adult Indians, while others saw problems with Indian transience (15%), prejudice (13%), program design (10%), and language barriers (5%).

It should be pointed out here that although twenty-five percent of the Indian adult population does not speak English ordinarily and most have at least some difficulty with English, virtually all were educated in English. For these Indians, language was a major barrier to educational competency. This barrier remains, as adult education programs are also conducted in English to the virtual exclusion of other languages.

Although the typical Indian-operated adult education program receives 95 percent of its operating budget from Title IV, Part C funding, 29 percent of these programs have applied to their state agency (SEA) for direct funding with the response that only 13 percent of the programs applying were subsequently approved for funding. Furthermore, only 35 percent of those applying for state funds ever received any form of notification that their proposal had been reviewed. Consequently, only about a fourth of the Indian administrators of programs applying for state funding were satisfied with the review process.

Finally, SEA officials were asked to characterize the relationship between their SEA adult education coordinator and the Indian community in their state on a scale of 1 (very poor) to 5 (excellent). Their responses varied, but the median was 3.4 (i.e., between "average" and

"above average"). This rating contrasts sharply with the median value of only 2.7 (between "below average" and "average") reported by the IEA project directors. About three-fourths of the IEA directors gave reasons for their ratings as well. On the positive side, 19 percent of the IEA officials reported a continuing or growing, supportive, mutual relationahip with the SEA. Several (9%) were more neutral, saying that the SEA's were supportive and cooperative but that there were no funds available, contacts, or affiliation. Unfortunately, however, the bulk (45%) of the comments tended to be negative. That is, either there was little or no relationship, communication, money, or support forthcoming or that the SEA's completely ignored or were not interested in the Indian community's adult education needs.

STUDY POLICY RECOMMENDATIONS

1. The Continuation of Research on Indian Education

Although this has been a multi-year study, the data analysis phase has been of insufficient duration to adequately analyze the myriad of data collected nationwide. From the analysis of the variables illustrated here, it is clear that there is much of substantial value left to analyse on a number of dimensions. The analysis and dissemination process should be continued. At the very least these data should be made available to competent researchers so that the analysis can continue.

2. Critical Evaluation of Indian Education Delivery Systems

The data leave little room for interpretation other than that there are serious differences between educational need and educational programs among and for Indian Americans. Although Indian operated or tribal schools generally yield slightly better educational results than do other schools, none is an optimization of educational techniques, practices and programs. It appears that a next important step would be to examine a sample of educational systems from pre-kindergarten to grade twelve and to determine the extent to which educational systems are optimizing their resources and delivering that which is required to strengthen Indian educational competence. This evaluation should encompass the range of educational policy from siting and selection of personnel through curriculum, space and materials to the finished product, the well trained and well educated high school graduate. Community and (former) student goals, successes, failures, needs and comments should be a major focus of this evaluation. As well, the

currency of the institutional programs should be examined closely as should be institutional paternalism. It is clear that educational policy toward Native Americans needs a substantial overhaul.

3. Revision of Educational Delivery System, Pre-Kindergarten to Twelfth Grade

Following the critical evaluation of the educational service delivery systems, those systems must be revised according to those guidelines developed as a result of the evaluation stage. It appears that major impacts may be made by merely changing the thrust of the systems from other directed systems to Indian directed ones. That will not be enough, however, as services must be made more attractive to students, of greater benefit to them and of the sort where they may look to success rather than failure when tested on the basis of performance alone. Teachers and others who are simply caretakers or custodians must be identified and challenged.

4. Provide Education in the Traditional Language

We have shown that language is a major barrier to success among Indian Americans. In order to affect an optimal learning situation, youngsters must be accommodated where an English language curriculum prevents them from achieving full understanding and application of principles, concepts and tools taught in the classroom. To facilitate intercultural communication, understanding and later occupational success English language classes should accompany the regular curriculum so that young people can learn this "foreign" tongue and add it to their vocabulary. Presently, there are simply not enough well trained and certified Indian Americans available to meet the need that would be created by this kind of change in teaching philosophy. As they were not

accommodated by the present educational system they are not prepared. This may mean that we might be obliged to train non-Indians in specific Indian language so that there might be the seed planted and nurtured among Indian Americans to complete a higher quality education themselves and replace others later in their own communities.

5. Increase the Capabilities of Teachers in Areas Where Indian Americans Reside

Just over half (58%) of the adult educators who are involved in IEA adult Indian education have completed college and have credentials to teach. Based on the performance of adult Indians, there will be considerable value in assessing each faculty member with respect to educational currency and pedagogy. Those who retain obsolescent or obsolete knowledge or practices should receive additional training or be replaced. Faculty salaries and budgets for supportive services, materials and space should be upgraded where recruitment, retention or the teaching environment is deficient and is a major factor in reduced performance. Housing and other environment factors should be addressed and made more attractive so as to add to the recruitment and retention of the best possible faculty.

6. Provide Educational Modules in Both Cultures, Traditional and Western

Cultural conflict, accommodation, amalgamation and borrowing are all prospects that youngsters will face throughout their lives as Indian Americans. The basic differences between Indian and other American cultures may be the most important factor in educational and employment success as Indians face the non-Indian world as children and adults. Whether the intercultural exchange occurs in the classroom, on the job or in the community, Indian youth should learn to understand both their

own culture and that of the other world. Their teachers alike should be well trained and well versed in the traditional culture(s) of those whose education they will guide. This dual understanding will logically enhance the feelings of worth of both teacher and student. When coupled with English language assistance where necessary, it should remove a major barrier to education and teaching alike.

7. Critically Evaluate the Adult Education System

Suffering from the same sclerosis as in the elementary and secondary system, adult education too must be carefully evaluated so as to determine those measures that might be taken to optimize it. The same methods and procedures used to evaluate the elementary and secondary systems must be used here; regardless of governmental base, so as to maximize the educational value of adult programs for Indian Americans.

8. Substantially Change Adult Education Delivery Systems

Again, as in the elementary and secondary programs, it is not enough to evaluate. Recommendations for change must be implemented. Merely increasing the number and quality of local Indian/community based programs with a well trained staff, fluent in Indian language(s) would be a first, welcome addition.

9. Increase Levels of Support for Indian Education

Not the first priority, nor the last, financial support will be a major component of systemic change. The addition of better prepared faculty, the additional training of current faculty, and the realignment of programs, facilities, and teaching aids will add substantially to the cost of education for Indian Americans. As shown in the

case of adult education, however, the cost per student year of education is relatively low at this time. Much of the additional expense will come initially as support services, equipment, space and facilities are added. Additional salaries and periodic upgrading of support will add as increments of current expenditures. Even in this era of defeated school bonds and fiscal cutbacks, Indian education programs must be aided financially where that support will be of major value in decreasing the gap between Indian and non-Indian education and performance.

10. Evaluate the Impact of Johnson-O'Malley Funding

The Johnson-O'Malley funds were set aside to reimburse states for tax revenues not received where Indian Americans are educated or trained under state auspices. Given the lack of accordance between need and educational program; and given the failure of state and public programs to produce the educational product that the Indian American expected at the outset, the Johnson-O'Malley system should be carefully evaluated to determine whether it is an important factor in the establishment and maintenance of educational programs which fulfill the needs and requirements of Indian Americans, whether it is received simply as general fund support or if some ingredients of these extremes are operating. Is the funding adequate? Appropriate? What can be done to optimize their use as beneficial to Indian Americans? Should these funds be allocated to Tribal government and Tribal educational systems instead of having states educate and train? It is apparent that a careful evaluation of the outcomes of Johnson-O'Malley must be made expeditiously.

11. Examine the Condition of Civil Rights Among Indian Americans, and Strictly Enforce Civil Rights Law

A separate or integrated, but nevertheless unequal, system of education prevails as far as Indian Americans are concerned. As well, employment, unemployment, underemployment and residential statistics all point to the continuation of systems of discrimination. Less than twenty percent of unemployed are receiving unemployment benefits, and the balance of the unemployed are not receiving substantial benefits from other sources. This raises questions with respect to equal treatment and equal opportunity. The educational and performance data show fairly conclusively that there are serious flaws in the education system where it serves Indian Americans. Regardless of area of residence or reservation/non-reservation status, equal opportunity in education simply does not exist for Indian Americans. Their lack of equal educational opportunity prevents others from becoming a reality. The data now in hand will later reveal other differences and trends by age cohort to be sure. Regardless of the outcome of further study, a thorough examination of the conditions of civil rights law as it has affected Indian Americans should be undertaken. Certainly, such an investigation will reveal serious deficiencies in the application and enforcement of current law.

12. Self-Determination in Indian Education

None of the questionnaires used posed the question "Do you think that education programs for Indian Americans would be more effective if they were administered and staffed by Indian Americans?" However, it is apparent that Indian operated programs are more effective in producing performance than are those that are administered and staffed

by non-Indians. Self-determination in Indian education proposes Indian development, staffing, operation and control of Indian educational programs. Put in that perspective, Indian education is now out of control. We have proposed changed in the Indian education system which presuppose the lack of qualified Indian teachers and administrators as an outcome of the education system now in place. Still, it appears that as a result of a multiplicity of social and cultural factors, self-determination is wholly appropriate for use in situations where the predominant culture and population is an Indian one. That is, from inception to successful implementation and evaluation, education should be in the hands of its typical parent with equality assured for those of other cultures and ancestry than the majority. The present system, however, is largely designed, administered and implemented by a social and cultural minority as a last vestige of paternalism. Self-determination is an important part of Indian culture and life today and it is certainly time that Indians who are the virtual exclusive residents of some school districts or other administrative areas gain control of their own educational planning, design, management, and implementation. Within areas where the population is mixed, rather than ignoring Indian potential for planning, program development and implementation, their notions, their talent and educational expertise and ideas must be integrated into educational programs. To ignore this potential is to lose the student and to perpetuate the lack of education and low levels of performance.

EPILOGUE: WHO LISTENS TO POLICY RESEARCH FINDINGS? HOW DOES SOCIAL ACTION PROCEED?

The final report of the study reported here was delivered to Secretary of Education Bell, in August of 1981. This report clearly displayed educational deficiencies among Indian Americans which were of crisis proportions. The report, however, did not merely chronicle these problems but explicated various policy alternatives and remedies that might be explored. These remedies have been reported here and they encompass the range of educational policy.

As yet, the Department of Education has not disseminated the report due to budget restrictions imposed under the 1981-82 FY budget, although he has indicated that he favors widespread dissemination. Assistant Attorney General William B. Reynolds, head of the Civil Rights Division of the Department of Justice has said[7] in October 1981 that rather than busing, there are other methods he would propose in order to provide educational equality. These remedies would include the development of magnet schools, special programs, the modification of school neighborhood boundaries, providing monetary incentives to students who change schools. At the same time, however, Reynolds stated that he did not think the problems of inferior teaching, educational programs or facilities for minority schools were widespread.

It is clear that Assistant Reynolds has not consulted with Secretary Bell or perhaps others in the Department of Education. The NIMS study has reported conclusively that the root of the educational problems among Indian Americans is structural. It begins with educational policy and ends with a seriously disadvantaged group. Where language is a barrier, other non-Indian minority groups may be similarly affected.

Further research complementing that already accomplished will illustrate these needs and disadvantages.

A major question here is what is the role of research in educational policy? What obligations do Federal and other agencies have to disseminate, support, or perhaps even understand social research? It is unlikely that Attorney Reynolds had read the NIMS Final Report or even its Executive Summary. The major impact of this and other studies may only come through the presentation of papers such as this which may serve to bring the original research out of figurative archives and promote policy change indirectly through academic and research discussion. The missing ingredient in policy research is a clear commitment to the informed use of research findings once they have been provided. We must explore new directions, new avenues that will link social research with social policy in education. It is clear that for the more than one million Indian Americans, that link is desperately needed.

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